

### **REMARKS/ARGUMENTS**

By action taken here, Applicant in no way intends to surrender any range of equivalents beyond that needed to patentably distinguish the claimed invention as a whole over the prior art. Applicant expressly reserves all such equivalents that may fall in the range between Applicant's literal claim recitations and combinations taught or suggested by the prior art.

#### **I. In the Specification**

The Examiner has objected to the title of the invention as not being descriptive in that it is "too generic." Although, Applicants do not concur with this objection, additional language has been added to more clearly identify the invention to wit: INTEGRATED SYSTEM AND METHOD FOR ELECTRONIC SPEECH RECOGNITION AND TRANSCRIPTION AMONG USERS HAVING HETEROGENEOUS PROTOCOLS. The title now specifically identifies that the system and method are directed to users having heterogeneous protocols.

#### **II. Applicants' Invention**

It is respectfully submitted that the Examiner has basically misunderstood Applicants' claimed invention in light of a very detailed specification, as further set forth below. Applicants claim a system and method for facilitating and integrating electronic speech recognition and transcription between and among networked users having heterogeneous systems and applications protocols.

First, the claimed invention is directed to a Speech Recognition and Transcription System.

Second, it is not a liner system like Cilurzo, et al. The system operates among Native Application Protocols, which a User employs to support interaction with Speech Information Requests and Responses and supports various communications protocols that the User employs to support communication within its legacy system. In addition, the system supports the Users Native Application Protocol which a User employs to support interaction with Speech Information Requests and Responses. For many transactions, a User employs the Native Communications Protocol and the Native Application Protocol to access its core processes, i.e., the User's Legacy Protocol.

Third, the system employs an Application Service Adapter (ASA) which is an application layer within the Speech Recognition and Transcription System that provides an interface among Users, Speech Recognition and Transcription Engines, the System Transaction Manager and other System components by allowing a User's existing application and/or a System components application to communicate with the Transaction Manager. Thus, for

example, the ASA provides a bi-directional translation service between the User's Native Communications Protocols/Native Application Protocols and a uniform system protocol, e.g. TCP/IP, used by the System Transaction Manager. In addition, the system employs an Applications Programming Interface (API) which is a set of services or protocols provided by an operating system to applications (computer programs) running under its control. The API may provide services or protocols geared to activities of a particular industry or group, such as physicians, engineers, lawyers, etc. This is where the system acquires its breadth to service various industries. All of the above are defined terms in the specification.

It is respectfully submitted that Applicants can be their own lexicographers and the terms in the claims must be read in light of the specification as a whole as well as these definitions which appear in the specification as filed.

### **III. The Cited Prior Art**

On page 4 of Applicants specification Applicant refers to a Cilurzo, et al. type system. Specifically Applicants state that, a

"Networked application service providers (ASPs) would appear to be the most efficient way to utilize sophisticated speech recognition and transcription engines for large-scale users, especially in the professions. The networked system would comprise an application service provider that could interconnect application software to high accuracy central speech recognition and transcription engines." (Emphases added)

However, Applicants go on to assert that,

"A barrier to implementation of such centralized systems, however, is that most businesses operate using their own internal "business" and /or system protocol, which include in many cases unique communications and application protocols. These protocols are unique to an entities system or organization, and are not universal in application. These systems are sometimes referred to as "legacy systems" and are very difficult to alter because they are the heart of the internal workings of a business, a computer system, or a hardware interface. For most network users, it is too costly, both in terms of equipment costs and disruptions in electronic communications, to replace a legacy system with a uniform "business" or system protocol merely to support network applications for speech recognition and transcription. Thus, most network systems are unavailable to legacy system users. "It would therefore be advantageous to seamlessly interface network application software and enable powerful speech recognition/transcription engines to interface with legacy systems." (paragraph 0011)

And further,

"Legacy network users must also train employees to operate on a network where the operational commands and language used to communicate with another user can be unique for each user on the network, i.e., one user must, to some extent, understand another users internal entity system protocol. This can make even simple requests to

another network user; say for a particular record form generated by transcription, a complex and time-consuming task. Thus, a large amount of skill and testing are needed to establish direct communications between the legacy or business system protocols of two different users. Therefore, a new user is forced to find ways to adapt its legacy system to the other legacy systems on the network, in order to interact with other network users' records and to transcribe seamlessly from one user to another. This is an expensive process both in terms of time and money. Some companies transact business over a public network, which partly resolves the issue. However, the use of a public network raises privacy concerns and does not address the heterogeneity of different internal entity protocols used by different entities in transacting information flow." (Paragraph 0012)

This recitation of difficulties in the prior art, which are resolved by Applicants' invention, is exemplified by the Cilurzo, et al. reference, which is a prime example of the prior art to which Applicants refer in their specification. As set forth below in detail, Cilurzo, et al. is solely an ASP which allows utilization of Internet interface (link) between otherwise homogeneous systems. Specifically, Cilurzo, et al. discloses speech recognition software in combination with application specific software on a communication's network wherein voice data from connected users having homogeneous protocol are transmitted to the application software residing on a central server in a linear fashion.

**The Cilurzo, et al. system is trivial.**

Cilurzo, et al. is trivial. It merely takes a PC speech and transcription system and moves it to a server. Specifically, Cilurzo, et al. states,

"As opposed to the costs involved in the obtaining and maintaining of a computer system with general purpose software, the initial cost and upkeep of specific application software can be prohibitive to the small business entrepreneur, often requiring an initial investment of more than 10 times the cost of the previously mentioned hardware and its bundled general purpose software. Services for maintaining the specific application software can be equally expensive and service may not be immediately available.

"Because of the expense, many small businesses forego the use of excellent available application specific software and develop their own application specific software. This home based software usually is not as good or reliable as the marketed products. Besides being saddled with inferior software such a small user must devote a significant amount of time and energy to the development and upkeep of the user developed software." (col. 1 lines 22-40)

It is clear that the motivation is cost. To solve this problem, Cilurzo, et al. merely moves the larger engine to a server and provides a link and passwords to identify user folders. All the interfaces stay the same. This is an obvious ASP system which Applicants find does not work for other than linear, homogenous systems. It is the trivial case.

**Cilurzo, et al. is linier.**

Cilurzo, et al. is linear, requiring all applications to match up to an identified application on the server. Cilurzo, et al. states, "The present invention is capable of being used by a subscriber to the network software service on any properly configured general purpose computer system, such as the one shown in FIG. 1" (col 3 lines 9-12). Further, as set forth in col. 4 lines 37-40, Cilurzo, et al. matches users to files on the server on pull up templates. Thus, only one user can use the server for a single job in a linear fashion from a configured computer. Applicants' claimed invention allows multiple users to interface in a single job, i.e. the surgeon, the radiologist, the anesthesiologist, etc from a myriad of devices which are configured in different manners such as a PDA, a desktop, a mainframe, and the like. Thus, Cilurzo, et al. teaches links of a single recognition engine to a single speech manager on a speech server that operates alone. In addition to the other mentioned limitations, this design does not allow for scalability beyond the capacity of the machine to handle a given number of interleaved sessions.

Cilurzo, et al. merely moves the engine to a server instead of the PC and provides a link. All specific user information is maintained in a labeled user data file. Furthermore, the linkage to other applications is only handled for applications made available server side.

**Cilurzo, et al. requires homogeneous protocols.**

Cilurzo, et al. simply matches a protocol from a client system to an appropriate server that can handle that protocol. This is exactly what the instant claimed invention was designed to eliminate. Everything Cilurzo, et al. refers to is very application specific and requires a matching protocol. For example, in col 3 lines 33-37, Cilurzo, et al. states, "**Also required, is an internet browser capable of running Java, software of Sun Microsystems. Examples of such a browser, is Netscape Navigator, by Netscape Communications Corporation, or Internet Explorer, by Microsoft Corporation.**" (Emphasis added)

Thus Cilurzo, et al.:

1. Requires a Homogenous environment. All components must be specifically written to support the system.
2. Requires all applications use the same protocols. For example, they must run on Java, they must support their speech technology. The applications referenced are applications that were specifically modified to support their speech recognition technology.
3. Simply uses a remote processor to convert the speech into text. The reference to data being displayed into "Lotus notes" fails to mention that this application and all others referred to require specific modifications to their programs to support speech input.

4. Requires the use of log-in to identify the source and type of data being sent and determine how to process the data. Applicants' claimed invention does not have such a limitation.

In short, there is nothing about the Cilurzo, et al system which remotely resembles Applicants' claimed invention, other than they employ remote engines.

### **The Rejection**

Claims 1-17 are rejected under 35 U.S.C. § 103 as being unpatentable over Cilurzo, et al. (6,434,526). "Facilitating the exchange of speech recognition and transcription" is taught by Cilurzo, et al. with his speech server 300, figure 3:

"at least one system transaction manager... one of the users employing a first system protocol.. more of the users employing a second system protocol that may be the same or different" (taught by his network server 202, figure 3); and

"at least one speech recognition and transcription engine" (taught by his speech manager 300 and speech engine 304 which facilitate speech recognition to be communicated to the user or users as necessary over the network)."

It is respectfully submitted that the recitation of what is taught by Cilurzo, et al. in the rejection is totally incorrect. Specifically, the network server 202 in figure 3 does not teach system protocol or the application of Cilurzo, et al. to heterogeneous systems. The Examiner has failed to point to one recitation in Cilurzo, et al. which even hints at a system which can handle non linear, heterogeneous system protocols.

It is further stated by the Examiner that,

"It is noted that Cilurzo et. al. does not explicitly use the term "speech information request". However, he teaches it is an object of the present invention to provide, on a network, specific application software with a speech recognition capability (col. 2, lines 46-48). It would have been obvious for a person having ordinary skill in the pertinent art, at the time the invention was made, to combine Cilurzo et. al's system with a variety of requests for information because he teaches that his system is for use with any type of application software and computers are capable of handling and providing a great variety of information such as his teachings of radiology (col. 1, line 65-col. 2, line 5), Lotus Notes (col. 5, line 21), medical information (col. 5, line 34) or chat sessions (col. 6, line 2). Thus, it would have been obvious to use speech recognition for requests of any information that a computer may manipulate because Cilurzo provides examples to include radiology or more general medical information as well as information that humans send to each other using other software such as Lotus Notes or chat software."

It is respectfully submitted that the Examiner has misread both, the Cilurzo, et al. reference and Applicants' Application. The Examiner's attention is directed to Figure 3 of Applicants' Application which shows the interface between the User and the system of the instant invention utilizing various User protocols.

To establish a *prima facie* case of obviousness, the U.S. Patent and Trademark Office must meet three basic criteria. First, the prior art reference (or references when combined), considered as a whole, must teach or suggest all the claimed limitations. Second, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, without the benefit of hindsight afforded by the claimed invention, to modify the reference or to combine reference teachings. Finally, there must be a reasonable expectation of success. *Hodosh v. Block Drug Co., Inc.*, 786 F.2d 1136, 1143 n. 5, 229 U.S.P.Q. 182, 187, n. 5 (Fed. Cir. 1986), MPEP 2141.

It is respectfully submitted that it is Examiner's burden to specifically show "substantial evidence" that the reference teaches every claimed aspect of the claimed invention. In *re Sang Su Lee* 277 F.3d 1338; 2002 U.S. App. LEXIS 855; 61 U.S.P.Q.2D (BNA) 1430 (2002). Mere conclusionary statements will not suffice. *In re Zurko*, 258 F. 3d 1379 (Fed. Cir. 2001). Factual findings of the Patent Office with respect to questions of patentability will be reviewed by the Federal Circuit for "substantial evidence."

As set forth above, the referenced patents actually seem to be excellent examples of the limitations of the prior art and underscores the uniqueness of the instant claimed invention. As set forth above, the prior art reference, considered as a whole, does not even suggest, much less teach, all the claimed limitations. In fact, the claimed invention of Applicants is not even addressed. The reference is a "trivial" ASP application which is linear and homogeneous. The Examiner's assertion that "...he (Cilurzo, et al. ) teaches that his system is for use with any type of application software and computers are capable of handling and providing a great variety of information such as his teachings of radiology (col. 1, line 65-col. 2, line 5), Lotus Notes (col. 5, line 21), medical information (col. 5, line 34) or chat sessions (col. 6, line 2)," totally misses the mark.

Further, there is no suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, without the benefit of hindsight afforded by the claimed invention, to modify the reference as set forth in the rejection. As previously set forth, the reference is totally devoid of even a suggestion of Applicants' claimed system.

Therefore, there can be no reasonable expectation of success, because the systems are inherently totally different. Finally, the Examiner has not met his burden to specifically show "substantial evidence" that the reference teaches every claimed aspect of the claimed invention. Even assuming, arguendo, that the Examiner's conclusion was supported by the reference, the Examiner's construction does not yield Applicants' claimed invention.

**Conclusion**

Applicant's claimed invention provides the following unique capabilities not hinted at in Cilurzo et. al:

- a. Each field uses a separate vocabulary and or speech recognition engine.
- b. Combined field selection data with dictated data allows for a heterogeneous input of data. All prior art requires either Speech Recognition or text data. Applicants allow for any combination of data types imbedded within Applicants' files to be processed.
- c. Allows one person to dictate into any device on any type of machine and or equipment and have another person "log-in" to the system to initiate processing of the job based on the parameters of the actual person who dictated and/or generated the information.
- d. Allows multiple people to dictate and/or generate information into the same "job" and properly handle the heterogeneous mixture processing that data with different profiles, engines, or other requirements identified by the person(s) generating the job. The cited patent is limited to a homogenous, linear environment where none of this could be possible.
- e. Applicants' heterogeneous, protocol independent invention allows for the use of a correction assistant and for association of the audio with the processed job for editing purposes. The cited prior art cannot.

In light of the forgoing, early and favorable action is solicited, and allowance of the presented claims.

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